इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”
Mazdoor Kisan Shakti Sangathan
“The Right to Information, The Right to Live”

“पुराने को छोड नये के तरफ”
Jawaharlal Nehru
“Step Out From the Old to the New”

IS 5386 (1969): General purpose Ship's Davit [TED 19: Marine Engineering and Safety Aids]

“ज्ञान से एक नये भारत का निर्माण”
Satyanarayan Gangaram Pitroda
“Invent a New India Using Knowledge”

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”
Bhartṛhari—Nītiśatakam
“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE

BRUTUM FULMEN
IGNORANTIA JURIS NON EXCUSAT
PROTECTED BY COPYRIGHT

IS : 5386 - 1969

(Reaffirmed 2002)

Indian Standard
SPECIFICATION FOR GENERAL PURPOSE SHIP'S DAVIT

(First Reprint NOVEMBER 1983)

UDC 629.125.65

© *Copyright* 1970

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Gr 2

May 1970

Indian Standard
SPECIFICATION FOR GENERAL PURPOSE SHIP'S DAVIT

Marine Instruments and Safety Aids Sectional Committee, EDC 68

Chairman	*Representing*
CAPT GURSARAN SINGH	Directorate General of Shipping (Ministry of Transport and Shipping)
Members	
CAPT S. B. AGA	Ericson & Richards, Bombay
CAPT D. MUNGAT (*Alternate*)	
CAPT P. ALEXANDER	The Company of Master Mariners of India, Bombay
CAPT P. S. VANCHISWAR (*Alternate*)	
CHIEF MECHANICAL ENGINEER, THE COMMISSIONERS FOR THE PORT OF CALCUTTA	Inter Port Consultations Cell, Calcutta
CHIEF MECHANICAL ENGINEER, BOMBAY PORT TRUST (*Alternate*)	
SHRI V. G. DAMLE	AFCO Ltd, Bombay
DEPUTY DIRECTOR OF WEAPONS POLICY AND TACTICS	Indian Navy
SHRI J. E. GILL	E. W. Stevens and Co Ltd, Calcutta
SHRI K. GURURAJA	Bharat Electronics Ltd, Bangalore
CAPT R. D. KOHLI	The Shipping Corporation of India Ltd, Bombay
CAPT C. G. BHOOT (*Alternate*)	
SHRI V. KRISHNAMURTHY	Directorate General of Technical Development
CAPT H. S. MAINI	The Indian National Shipowners' Association, Bombay
SHRI SHAREEF MOLOOBHOY	Ahmed S. Moloobhoy & Sons, Bombay
SHRI T. V. S. RAO	Hindustan Shipyard Ltd, Visakhapatnam
SHRI C. S. R. ANJANEYULU (*Alternate*)	
DR E. SCHIMMEL	Siemens Engineering & Manufacturing Co of India Ltd, Bombay
SHRI O. P. TALWAR (*Alternate*)	
SHRI P. A. SHAPARIA	Shaparia Dock & Steel Co Pvt Ltd, Bombay
SHRI C. N. MISTRY (*Alternate*)	
SHRI M. VELU	Central Institute of Fisheries Technology, Ernakulam
SHRI M. V. PATANKAR, Director (Mech Engg)	Director General, ISI (*Ex-officio Member*)

Secretary

SHRI K. S. SUBRAMANIAM
Officer on Special Duty (Mech Engg), ISI

(*Continued on page* 2)

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI

(*Continued from page* 1)

Lifeboats, Liferafts and Launching Gear Subcommittee, EDC 68 : 2

Convener	*Representing*
Shri D. B. Irani	Directorate General of Shipping (Ministry of Shipping and Transport)
Members	
Shri S. D. Batra Capt S. Rajagopal } (*Alternates* to Shri D. B. Irani)	
Capt S. B. Aga	Ericson & Richards, Bombay
Shri V. G. Damle	AFCO Ltd, Bombay
Capt R. D. Kohli	The Shipping Corporation of India Ltd, Bombay
Capt C. G. Bhoot (*Alternate*)	
S/Lt Mohan Raman	Indian Navy
Lt Cdr R. B. Subramanian (*Alternate*)	
Shri P. A. Shaparia	Shaparia Dock & Steel Co Pvt Ltd, Bombay
Shri C. N. Mistry (*Alternate*)	

Indian Standard
SPECIFICATION FOR GENERAL PURPOSE SHIP'S DAVIT

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 21 November 1969, after the draft finalized by the Marine Instruments and Safety Aids Sectional Committee had been approved by the Mechanical Engineering Division Council.

0.2 Davits are fitted in various locations to assist in discharging of ship's stores from launches and other small crafts, to lower, raise and retain the gang-way ladder in the required position, etc.

0.3 The davits covered by this standard are of the light-duty types. However the smallest section of the davit has been so dimensioned as to meet the classification society requirements.

0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard specifies the requirements for light duty davits fitted on ships, for general use.

2. TERMINOLOGY

2.1 The nomenclature used in this standard, shall be as shown in Tables 1 and 2.

3. CONSTRUCTION

3.1 Davits shall be forged in one piece. The head of davit shall be made into a spherical shape, with its top and bottom being flattened to secure the guy plate in position. The foot of the davit shall be machined to suit the pivot socket which is attached to deck in a suitable manner. Horn cleats

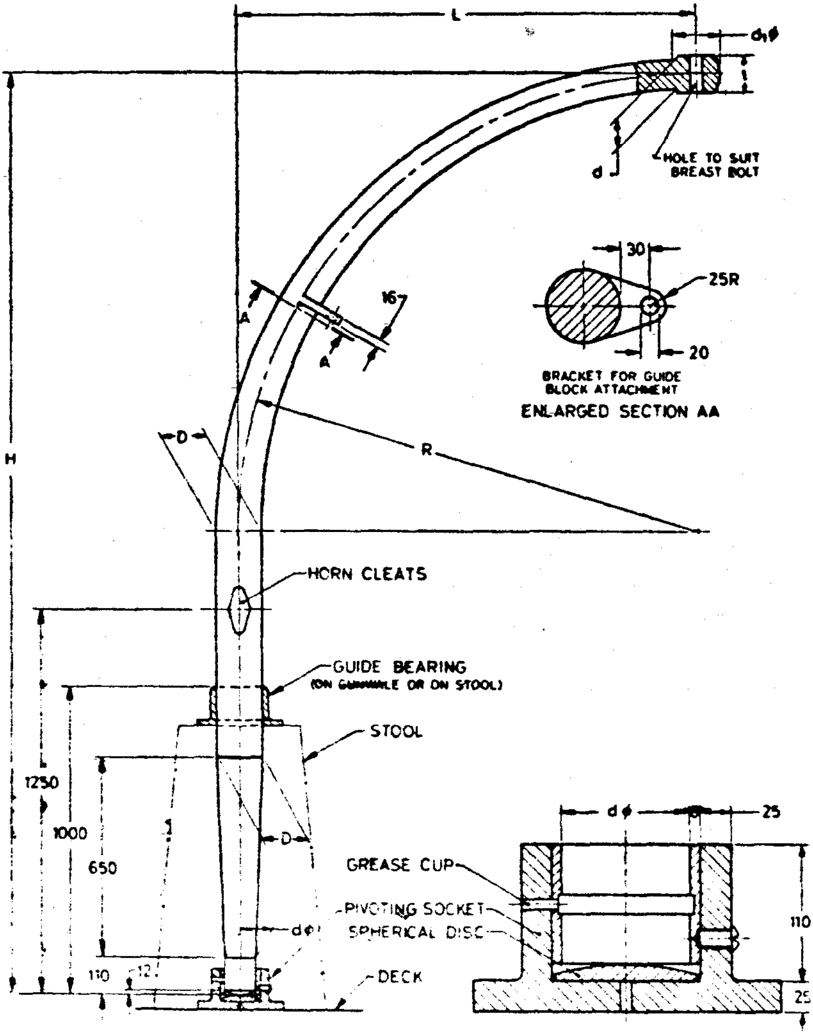
---

*Rules for rounding off numerical values (*revised*).

TABLE 1 DIMENSIONS FOR DAVITS

(*Clauses* 2.1 *and* 5.1)

All dimensions in millimetres.

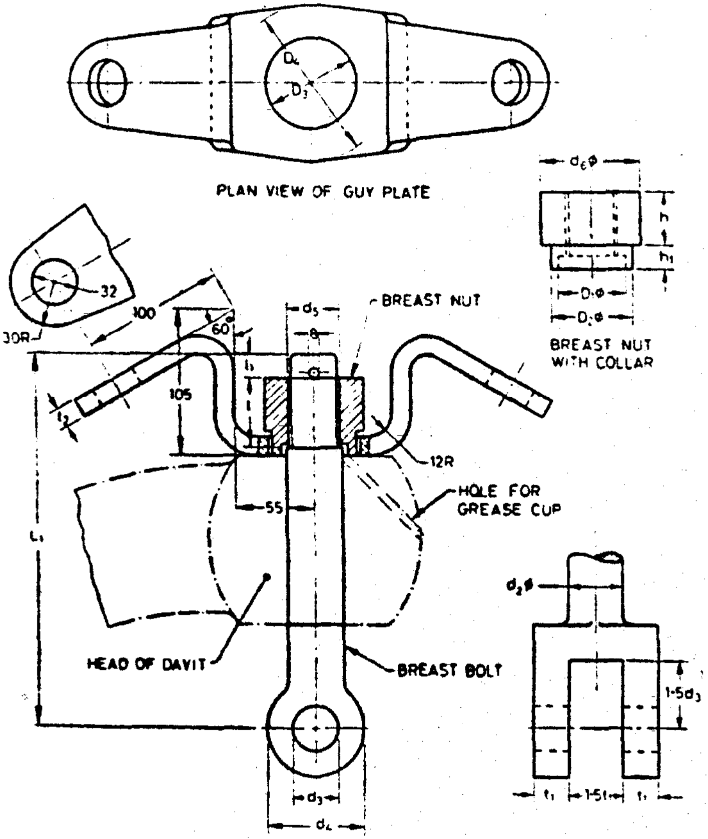


LOAD IN TONNES	*H*	*L*	*D*	*d*	d_1	*R*	*t*
0·5	2 500	1 100	95	65	95	1 100	75
1·0	3 000	1 500	130	90	130	1 500	105
1·5	3 000	1 500	150	105	150	1 500	120

TABLE 2 DIMENSIONS FOR BREAST BOLTS, NUTS AND GUY PLATES

(*Clauses* 2.1 *and* 5.2)

All dimensions in millimetres.



LOAD IN TONNES	BREAST BOLT								BREAST NUT					GUY PLATE		
	L_1	l	l_1	t_1	d_2	d_3	d_4	d_5	d_6	h	h_1	D_1	D_2	D_3	D_4	t_2
0·5	170	32	12	15	26	20	44	M24	50	25	12	30	40	42	80	9
1·0	230	40	15	20	32	28	60	M30	60	32	15	35	50	54	100	12
1·5	265	50	16	25	39	32	68	M36	70	38	17	45	60	64	110	14

and the bracket for guide block may be welded on the davit. The davit breast bolt and nut shall be such as to permit the swivelling of the guy plate. The guide bearing may be attached to the gunwale or on to a high stool fixed to the deck.

4. MATERIAL

4.1 The material used shall be as shown below:

Name of Part	*Material*	*Relevant IS*:
Davit	Steel	Grades I & II of IS : 2004-1962*
Guy plate	Mild steel	IS : 226-1962†
Pivot socket	Cast steel	IS : 1030-1962‡
Spherical disc	High tensile steel	IS : 961-1962§
Guide bearing	Cast steel	IS : 1030-1962‡
Bush for pivot socket	Brass	IS : 319-1968‖
Head pin	Steel	Grade IV of IS : 2004-1962*
Collar nut	Steel	Grade III of IS : 2004-1962*

5. DIMENSIONS

5.1 The dimensions of the finished davit shall be as shown in Table 1.

5.2 The dimensions of the breast bolts, breast nuts and the guy plates shall be as shown in Table 2.

6. TOLERANCE

6.1 The tolerance on dimensions '*d*' shall be ±0·5 mm.

6.2 The tolerance on dimensions '*L*' and '*H*' shall be ±5 mm.

6.3 The tolerance on other dimensions shall conform to coarse series of IS : 2101-1962¶.

6.4 Dimensions of the horn cleats shall be in accordance with Type 2B25 of IS : 5220-1969**.

---

*Specification for carbon steel forgings for general engineering purposes.

†Specification for structural steel (standard quality) (*third revision*).

‡Specification for steel castings for general engineering purposes (*revised*).

§Specification for structural steel (high tensile) (*revised*).

‖Specification for free-cutting brass rods and sections (*second revision*).

¶Recommendations for limits and fits for sizes above 500 mm up to 3 150 mm.

**Specification for forged horn cleats.

7. TEST

7.1 The davit shall be tested on board in its location or in the manufacturer's premises. When testing the davit in the manufacturer's premises, the davit shall be mounted on a suitable structure, such that, the test load may be lifted through a height of 6 metres. The test load shall be two and a half times the permissible working load of the davit. Prior to commencement of test, distances *L* and *H* shall be measured accurately and recorded. The test load shall be raised and lowered through a distance of 6 metres consecutively for ten times, within a period of one hour. At the end of the test the distances *L* and *H* shall again be measured and compared with the original values. The davit shall be deemed to have passed the test if there is no change in the values of *L* and *H*.

8. DESIGNATION

8.1 Davits shall be designated by the load it can lift, reach '*L*' and the number of this standard.

Example:

A davit designed to lift 1 tonne load with a reach of 1 500 mm, shall be designated as:

DAVIT 1 × 1 500 IS : 5386

9. MARKING

9.1 A tally plate shall be attached to the davit indicating the following information:

a) Safe working load and the reach of the davit in millimetres,
b) Test load,
c) Date of manufacture/test,
d) Estimated weight of davit, and
e) Initials of person conducting the test.

9.1.1 The davits may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.